

## Certificate of Analysis

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**Product Name:** PTIQ

**Catalog No.:** 4604

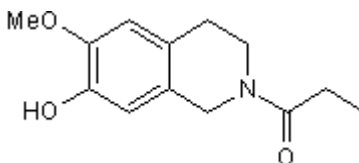
**Batch No.:** 1

**CAS Number:** 1032822-42-6

**IUPAC Name:** 1-(3,4-Dihydro-7-hydroxy-6-methoxy-2(1*H*)-isoquinoliny)-1-propanone

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>13</sub>H<sub>17</sub>NO<sub>3</sub>  
**Batch Molecular Weight:** 235.28  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 1eq. NaOH to 20 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.47 (Chloroform:Methanol [9:1])  
**HPLC:** Shows >99.3% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	66.36	7.28	5.95
Found	66.27	7.12	5.93

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

## Product Information

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### Description:

Potent inhibitor of MMP-3 expression ( $IC_{50}$  = 60 nM); down-regulates induction of MMP-3 in both stressed dopaminergic cells and activated microglia. Also suppresses proinflammatory responses and inhibits NO production in activated microglia. Attenuates motor deficits, prevents neurodegeneration and suppresses microglial activation in a Parkinson's disease mouse model. Brain penetrant.

### Physical and Chemical Properties:

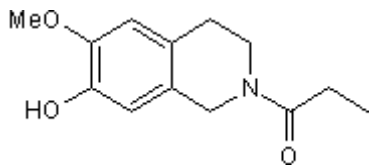
Batch Molecular Formula:  $C_{13}H_{17}NO_3$

Batch Molecular Weight: 235.28

Physical Appearance: White solid

**Minimum Purity:** >98%

### Batch Molecular Structure:



**Storage:** Store at RT

### Solubility & Usage Info:

DMSO to 100 mM

1eq. NaOH to 20 mM

### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

### References:

**Seo et al** (2008) Syntheses of tetrahydroisoquinoline derivatives that inhibit NO production in activated BV-2 microglial cells. *Eur.J.Med.Chem.* **43** 1160. PMID: 17980460.

**Son et al** (2012) A novel compound PTIQ protects the nigral dopaminergic neurones in an animal model of Parkinsons disease induced by MPTP. *Br.J.Pharmacol.* **165** 2213. PMID: 21951056.

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